ATTACHMENT A

1 N PROCEDURE

TABLE OF CONTENTS

ATTACHMENT A - 1N PROCEDURE

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A.   APPLICABILITY

1.   This procedure may be used to provide substitute data for affected sources that meet the specified conditions in Chapter 2, Subdivision E, Paragraph 1, Subparagraph b, clause i and Chapter 2, Subdivison E, Paragraph 2, Subparagraph c, clause i.

B.   PROCEDURE

1.   Where N is the number of hours of missing emissions data, determine the substitute hourly SO_X concentration (in ppmv), the fuel gas sulfur content (in ppmv), or the hourly flow rate (in scfh) by averaging the measured or substituted values for the 1N hours immediately before the missing data period and the 1N hours immediately after the missing data period.

2.   Where 1N hours before or after the missing data period includes a missing data hour, the substituted value previously recorded for such hour(s) pursuant to the missing data procedure shall be used to determine the average in accordance with Subdivision B, Paragraph 1 above.

3.   Substitute the calculated average value for each hour of the N hours of missing data.

EXAMPLES OF 1 N PROCEDURE
EXAMPLE 1

HOUR	DATA POINT (LB/HR)
1:00 A.M.	30
2:00 A.M.	25
3:00 A.M	32
4:00 A.M.	34
5:00 A.M.	Missing
6:00 A.M.	Missing
7:00 A.M.	Missing
8:00 A.M.	27
9:00 A.M.	22
10:00 A.M.	25
11:00 A.M	30

To fill in the missing three hours, take the data points from the 3 hours before and the 3 hours after the missing data period to determine an average emission over the 3 hours

$$\text{average emissions} = \frac{25 + 32 + 34 + 27 + 22 + 25}{6} = 27.5 \text{ lb/hr.}$$

The filled in data set should read as follows:

EXAMPLE 1 (continued)

HOUR	DATA POINT (LB/HR)
1:00 A.M.	30
2:00 A.M.	25
3:00 A.M.	32
4:00 A.M.	34
5:00 A.M.	27.5
6:00 A.M.	27.5
7:00 A.M.	27.5
8:00 A.M.	27
9:00 A.M.	22
10:00 A.M.	25
11:00 A.M.	30

EXAMPLES OF 1 N PROCEDURE

EXAMPLE 2

HOUR	DATA POINT (LB/HR)
1:00 A.M.	45
2:00 A.M.	50
3:00 A.M.	53
4:00 A.M.	Missing
5:00 A.M.	Missing
6:00 A.M.	Missing
7:00 A.M.	58
8:00 A.M.	Missing
9:00 A.M.	48
10:00 A.M.	45

In this example the missing data point at 8 A.M. is in the 3-hour period after the 3- hour missing data period. We first fill the 8.A.M. slot.

$$\text{average emissions for 8 A.M.} = \frac{58+48}{2} = 53$$

The filled in data sheet at this point should read as follows:

EXAMPLE 2 (continued)

HOUR	DATA POINT (LB/HR)
1:00 A.M.	45
2:00 A.M.	50
3:00 A.M.	53
4:00 A.M.	Missing
5:00 A.M.	Missing
6:00 A.M.	Missing
7:00 A.M.	58
8:00 A.M.	53
9:00 A.M.	48
10:00 A.M.	45

The average for the three hour missing data period is:

$$\text{average emissions} = \frac{45+50+53+58+53+48}{6} = 51.2$$

The completed filled in data sheet should read as follows:

EXAMPLE 2 (continued)

HOUR	DATA POINT (LB/HR)
1:00 A.M.	45
2:00 A.M.	50
3:00 A.M.	53
4:00 A.M.	51.2
5:00 A.M.	51.2
6:00 A.M.	51.2
7:00 A.M.	58
8:00 A.M.	53
9:00 A.M.	48
10:00 A.M.	45